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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,266	07/03/2003	Michael A. Fetcenko	OBC-103.1	4865

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ENERGY CONVERSION DEVICES, INC.  
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ROCHESTER HILLS, MI 48309

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/613,266

Applicant(s)

FETCENKO ET AL.

Examiner

George P. Wyszomierski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant has amended the specification to designate that the present application is a divisional of an earlier filed nonprovisional application. Because this designation was requested after the time periods provided by 37 CFR 1.78(a)(2)(ii), then a petition must also be filed as set forth in 37 CFR 1.78(a)(3). Particularly, in the present case, items (ii) and (iii) of that section (surcharge, statement that entire delay was unintentional) should accompany the petition.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, nothing in the specification as originally filed disclosed, either explicitly or implicitly, the presently claimed limitation in claim 1 that "said first reactant does not comprise a hydroxide group". It should be noted that the lack of a disclosure of a particular feature in the specification will not generally support a negative limitation in a claim directed to the absence of that feature. Thus claim 1 and dependent claims 2-19 are rejected under this statute.

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4. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by any of Bogauchi et al. (U.S. Patent 5,489,314), Ovshinsky et al. (U.S. Patent 5,523,182), Baba et al. (U.S. Patent 5,702,762), or Sakamoto et al. (U.S. Patent 6,153,334), or under 35 U.S.C. 102(e) as being anticipated by Tanigawa et al. (U.S. Patent 6,471,890).

The examples of Bogauchi, Ovshinsky, Baba, Sakamoto, and Tanigawa disclose specific processes that are completely in accord with those as defined in the instant claims.

6. Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. Sakamoto column 10, lines 10-39 discloses a process completely in accord with that defined in the instant claims. It is particularly noted that none of the initial nickel-containing materials in this process of Sakamoto comprise hydroxide groups.

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Bogauchi et al., Ovshinsky et al., Baba et al., Sakamoto et al., or Tanigawa et al.

The prior art references do not specify forming a complex between the second reactant and the nickel of the first reactant, and do not specify the oxidation state of the nickel. However,

a) The specific substances formed in the prior art reactions would depend upon the actual reactants used and the processing conditions present. Because these factors may be the same in the prior art and the present invention, one of skill in the art would expect the same results, in the form of complexes or otherwise from those reactions, in both the prior art and the invention.

b) In general, the element nickel has an oxidation state of +2 or +3 as presently claimed; it is a reasonable assumption that the prior art nickel materials would comprise nickel in the claimed oxidation state(s).

Thus, a prima facie case of obviousness is established between the disclosures of Bogauchi et al., Ovshinsky et al., Baba et al., Sakamoto et al., or Tanigawa et al. and the presently claimed invention.

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9. Claims 2, 5, 10, 11, 13, 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto et al.

Sakamoto does not specify the precise limitations as defined in the instant claims. However,

a) With respect to claims 2 and 5, the Sakamoto process includes the use of an oxidizing agent; it is a reasonable assumption that some of the nickel particles are partially oxidized, and some not oxidized, as required by the instant claims.

b) With respect to claims 10 and 11, example 8 of Sakamoto discusses the preparation of powders containing cobalt. Thus, to produce materials in accord with the instant claims would have been well within the level of one of ordinary skill in the art.

c) With respect to claim 13, the prior art process includes the production of spherical powders as presently claimed.

d) With respect to claim 14, the Abstract of Sakamoto discloses a tap density as presently claimed. With regard to the apparent density and particle size, it is a reasonable assumption that these factors would be the same in the Sakamoto process and the invention, given that the reactants and reaction conditions may be the same in both instances.

e) With regard to claims 16-19, the degree of oxidation is clearly dependent upon such factors as the composition of the initial material, the precise oxidation agent used and in what amount, and the temperature employed in the prior art processes. All of these parameters can be varied in the Sakamoto process, as evidenced by the numerous examples disclosed therein. Thus, the examiner's position is that one of ordinary skill in the art would have easily been able to vary the reaction conditions in Sakamoto to achieve a desired degree of oxidation.

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Thus, the disclosure of Sakamoto et al. is held to create a prima facie case of obviousness of the presently claimed invention.

10. In a response filed August 7, 2006, Applicant has amended independent claim 1 to require that the first reactant comprising nickel does not comprise a hydroxide group; this amendment clearly overcomes the previous rejections based upon Bogauchi et al., Ovshinsky et al., Baba et al., or Tanigawa et al. While Applicant alleges that this amendment overcomes the rejection based upon Sakamoto et al. as well, the examiner respectfully disagrees. The initial nickel-containing reactants in the process as disclosed in column 10 of Sakamoto do not appear to include a hydroxide group, and the prior art is thus consistent with the claims as presently amended. With regard to new claims 20-28, these claims ~~20-28, these claims~~ are rejected for reasons as discussed in items 5 and 8 supra.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be


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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. All patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (571)-273-8300. This Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER  
GROUP 1700

GPW  
October 10, 2006